

PROPOSED RULE 415: ODORS FROM RENDERING FACILITIES

(a) Purpose

The purpose of this rule is to reduce odors from facilities rendering animals and animal parts.

(b) Applicability

This rule applies to new and existing rendering facilities that process raw rendering materials; and wastewater associated with rendering.

(c) Definitions

- (1) BATCH COOKER means a cooking vessel used for rendering into which raw rendering material is loaded in discrete batches, cooked and unloaded at the end of the cooking cycle.
- (2) CLOSED SYSTEM means a system handling any combination of solids, liquids, vapors, and air at a rendering facility, in which odors are contained within the system. A system that meets the requirements of paragraph (f)(3) is a closed system. A batch cooker is not a closed system.
- (3) COLLECTION CENTER means a receiving area not located at a rendering facility or an integrated rendering facility, for the temporary storage of animal carcasses, packinghouse waste, or other products, prior to their transportation to a licensed rendering plant or pet food processor.
- (4) CONFIRMED ODOR EVENT means the occurrence of a rendering-related odor resulting in three or more complaints by different individuals from different addresses, and the source of the odor is verified by District personnel trained in odor inspection techniques.
- (5) CONTROL EFFICIENCY means the percentage value representing the reduction of odorous compounds in an odor control system. Control efficiency is calculated as the uncontrolled rate minus the controlled rate, divided by the uncontrolled rate, multiplied by 100.
- (6) EDIBLE RENDERING means an operation that produces edible fats and protein commodities for human consumption.
- (7) ENCLOSURE ENVELOPE means the total surface area of a building directly enclosing rendering operations and includes the enclosure's exterior walls, floor and horizontal projection of the roof on the ground.
- (8) EXISTING FACILITY means a facility subject to the requirements of this rule that began operation prior to (*date of adoption*).

- (9) FAT COMMODITY means a finished fat product from rendering and derived from animal fat or plant sources.
- (10) INTEGRATED FACILITY or INTEGRATED RENDERING FACILITY means for the purpose of this rule a rendering facility operated at the same physical location as a slaughterhouse or meat-packing plant.
- (11) NEW FACILITY means a facility subject to the requirements of this rule that begins operation on or after (*date of adoption*)
- (12) ODOR means the perception experienced by a person when one or more chemical substances in the air come into contact with the human olfactory nerves.
- (13) ODOR CONTROL SYSTEM means equipment serving a permanent total enclosure that is designed to reduce odorous emissions captured in the permanent total enclosure. Odor control equipment does not mean a closed system.
- (14) ODOR GENERATING SOURCE means a process at a rendering facility from which odors may be emitted, including raw material receiving, size reduction, cooking, separating and processing of cooked materials into fat commodities and protein commodities, and wastewater treatment.
- (15) PERMANENT TOTAL ENCLOSURE means for the purpose of this rule an enclosure having a permanently installed roof and exterior walls which are constructed of solid material, and completely surround one or more odor-generating sources such that all odors from processes conducted within the enclosure are contained therein.
- (16) PROTEIN COMMODITY means a finished protein produced from rendering and derived from raw rendering materials of either animal or plant origin.
- (17) RAW RENDERING MATERIALS means materials introduced into the receiving area at a rendering facility, and may include animal carcasses and parts, packing house or grocery store cuttings, out-of-date products from grocery stores, blood, viscera, offal, feces and other organic matter generated by food processors. Raw rendering materials does not include used cooking oil.
- (18) RECEIVING AREA means the area, tank or pit within a rendering facility where raw rendering materials are unloaded from a vehicle or container, or transferred from another portion of the facility for the purpose of rendering these materials.

- (19) RENDERING means operations and processes that convert raw rendering materials into fat commodities and protein commodities by heat and mechanical separation.
- (20) RENDERING FACILITY means a facility engaged in rendering operations.
- (21) ROUTINE ENCLOSURE OPENING means any of the following areas that may be open during normal operations at facilities subject to this rule, and through which odors have the potential to escape from a permanent total enclosure:
 - (A) Vents for natural or forced-air ventilation, including but not limited to gable vents, eave vents, wall vents and rooftop vents;
 - (B) Windows, doors and doorways; and
 - (C) Spaces below metal sheathing that do not reach the foundation.
- (22) SPECIFIC CAUSE ANALYSIS means a process used by a facility subject to this rule to investigate the cause of a confirmed odor event, identify corrective measures needed and measures taken or that will be taken to prevent recurrence of a similar event.
- (23) TRAP GREASE means cooking grease, food waste, and wastewater from a restaurant grease trap or interceptor.
- (24) USED COOKING OIL means oils and fats that have been used for cooking or frying in the food processing industry, restaurants or fast food establishments.
- (25) VENTILATION SYSTEM means an air-handling system serving odor control equipment that is designed and operated to: (a) draw air from within a permanent total enclosure and deliver it to approved odor control equipment; and (b) maintain negative air pressure through each routine enclosure opening. Ventilation system does not mean a system for heating, ventilation, or air conditioning (HVAC) used for comfort heating or cooling.
- (26) WASTEWATER TREATMENT means, for the purpose of this rule, any chemical, biological, or mechanical procedure used to remove, reduce, or neutralize contaminants in water at a rendering facility from rendering- and trap grease-related operations.

(d) Requirements for New and Existing Facilities

(1) Core Requirements for all Facilities

(A) Odor Best Management Practices (BMP)

The owner or operator of a rendering facility shall implement all applicable odor BMP identified in subdivision (e) upon startup of a new facility, or within 90 days after (*date of adoption*) or other schedule as required in the BMP for an existing facility.

(B) Permanent Total Enclosure or Operation in Closed System

(i) The owner or operator of a new rendering facility shall not conduct rendering operations unless the requirements for enclosure, ventilation and odor control system standards in subdivision (f) are met.

(ii) The owner or operator of an existing rendering facility shall submit a permit application for each permanent total enclosure required under this rule within 12 months after (*date of adoption*).

(iii) The owner or operator of an existing rendering facility shall meet the requirements for either a permanent total enclosure and applicable requirements for ventilation of a permanent total enclosure to odor control equipment, or a closed system pursuant to subdivision (f) no later than 24 months after the date a Permit to Construct is issued.

(C) Wastewater Treatment

(i) The owner or operator of a new rendering facility shall not conduct rendering operations unless the requirements for wastewater treatment in subdivision (g) are met.

(ii) The owner or operator of an existing rendering facility shall submit a permit application for each permanent total enclosure for wastewater operations required under this rule within 12 months after (*date of adoption*).

(iii) The owner or operator of an existing rendering facility shall meet the requirements for permanent total enclosure or closed system, and the requirements for ventilation of permanent total enclosures to odor control equipment pursuant to subdivision (f) no later than 12 months after the date a Permit to Construct is issued.

(D) Notification of Intent to Enclose or Operate in a Closed System

The owner or operator of an existing rendering facility shall submit a letter of intent to the Executive Officer within 6 months after (*date of adoption*) stating an intent to either enclose odor-emitting operations and processes within a permanent total enclosure or operate them in one or more closed systems, for all equipment and processes subject to paragraph (f)(1) or subdivision (g) that are not located within a permanent total enclosure or operated in a closed system as of (*date of adoption*).

(E) Increments of Construction Progress

Within 6 months after the date a permit to construct is issued for a permanent total enclosure required by this rule, the owner or operator of a rendering facility shall initiate construction of the enclosure; such activity shall include at a minimum breaking ground for the foundation of a new enclosure or for the odor control equipment.

(F) Request for Time Extension of Completing a Permanent Total Enclosure

An owner or operator of a rendering facility may submit a request to the Executive Officer for a one-time extension for up to one year from the date specified under clauses (d)(1)(B)(iii) or (d)(1)(C)(iii) to complete construction of a permanent total enclosure and applicable ventilation and odor control system required under subdivision (f).

(i) An owner or operator of a rendering facility that submits a request for a time extension shall submit the request at least 180 days before the permanent total enclosure and ventilation system deadline in subparagraph (d)(1)(B) or (d)(1)(C), as appropriate.

(ii) A request for a time extension shall provide the following information to the Executive Officer:

(I) A description of the enclosure for which a time extension is needed;

(II) The reason(s) a time extension is needed;

(III) Progress to date in planning, design and construction of the enclosure; and

(IV) The length of time requested for the extension.

(iii) Approval of Time Extensions

The Executive Officer will review the request for the time extension and will approve, modify or reject the time extension based on whether the owner or operator provides sufficient details identifying the reason(s) a time extension is needed that demonstrates to the Executive Officer that there are specific circumstances beyond the control of the owner or operator that necessitate additional time to complete construction of the total permanent enclosure and applicable ventilation and odor control system. Such demonstration may include, but is not limited to, providing detailed schedules, engineering designs, construction plans, permit applications, and purchase orders.

(2) Submittal of Odor Mitigation Plan (OMP).

The owner or operator of a rendering facility shall submit an Odor Mitigation Plan (OMP) to the Executive Officer within 90 days after notification by the Executive Officer, pursuant to the requirements of subdivision (h), if:

- (A) The owner or operator of a facility subject to this rule receives a Notice of Violation for Public Nuisance related to rendering odors pursuant to Rule 402; or
- (B) Three or more confirmed odor events related to rendering odors for a facility are received during any consecutive 180-day period.

The owner or operator shall comply with all terms and conditions of their approved Odor Mitigation Plan. A violation of any term of an approved Odor Mitigation Plan is a violation of this rule. Submittal of an Odor Mitigation Plan shall be in addition to any settlement of the Notice of Violation triggering such submittal.

(3) Specific Cause Analysis

Within 1 business day after notification by the Executive Officer of a confirmed odor event for a facility subject to this rule, the owner or operator of a rendering facility shall initiate a specific cause analysis and submit a report in the format specified by the Executive Officer within 30 days. The report shall include a description of activities during the time of the odor event, any upset or breakdown conditions at the facility, including potential

sources of odors and emission points for all equipment required to be enclosed under or subdivisions (f) and (g). In addition, the report must identify any corrective measures taken or that will be taken to prevent recurrence of a similar event.

(e) Requirements for Odor Best Management Practices (BMP)

The owner or operator of a rendering facility shall implement all applicable odor BMP listed in paragraphs (e)(1) through (e)(11):

(1) Covering of Incoming Transport Vehicles

Transport vehicles delivering raw rendering materials to a rendering facility from offsite locations shall not be permitted past the first point of contact at a rendering facility for incoming trucks, such as a guard shack or weigh station, unless the cargo area of the vehicle is completely enclosed or fully tarped.

(2) Delivery of Raw Rendering Materials

After the date a permanent total enclosure is required under clause (d)(1)(B)(iii) or upon completion of a permanent total enclosure, whichever is sooner, the owner or operator shall ensure incoming raw rendering materials are transferred into the permanent total enclosure pursuant to subdivision (f) or into covered containers within 60 minutes after the end of material delivery.

(3) Washing of Outgoing Transport Vehicles

Where raw rendering materials come directly into contact with a transport vehicle and the cargo area is exposed to the air, the cargo area shall be washed before exiting the facility.

(4) Washing of Drums and Containers

Open drums or containers holding raw rendering materials shall be washed prior to leaving a rendering facility.

(5) Holding Time of Incoming Raw Rendering Materials

Before the date a permanent total enclosure is required under clause (d)(1)(B)(iii), incoming raw rendering materials shall enter the cooking process, be staged in a permanent total enclosure or stored in a covered container within 4 hours after delivery for material delivered at ambient temperature, or within 6 hours after delivery for material delivered below ambient temperature.

- (6) **Repair of Raw Material Receiving Area**
Notwithstanding the time limit of subparagraph (d)(1)(A), within 180 days after (*date of adoption*), all areas of broken concrete or asphalt, including but not limited to divots, cracks, potholes and spalling of concrete or asphalt in the raw material receiving area of a rendering facility, or the rendering portion of a facility integrated with a slaughterhouse or meat-packing plant where raw rendering materials are unloaded and touch the ground outside of an enclosure shall be patched, repaired, or repaved as necessary to prevent standing water or puddles with a surface area greater than one square foot from accumulating.
- (7) **Holding Time of Raw Materials after Size-reduction**
Within one hour after size-reduction or grinding activities, raw rendering materials at a facility utilizing a batch cooking process shall enter the cooking process, or be staged in a permanent total enclosure or stored in a covered container.
- (8) **Holding Time of Cooked Materials**
Within one hour after being removed from a batch cooker at a rendering facility subject to this rule, cooked materials shall be placed in downstream processing equipment to be separated into protein and fat commodities or placed in a covered container for temporary storage.
- (9) **Transfer of Raw or Cooked Rendering Materials between Enclosures**
Raw rendering materials at all rendering facilities and cooked rendering materials at facilities with a batch cooker shall be transported between permanent total enclosures only through a closed system of conveyance, or by covered containers.
- (10) **Washdown of Receiving Area**
Walls, floors, and other surfaces of the receiving area of a rendering facility and any equipment operated in the receiving area, including screw conveyors, pumps, shovels, hoses, etc., shall be thoroughly washed to remove animal matter at least once each working day.
- (11) **Cleaning Floor Drains**
Accessible interior and exterior floor drains shall be inspected and cleaned not less frequently than once per month to remove accumulation of rendering materials.
- (12) **The owner or operator of a rendering facility may use an Alternative Odor BMP provided:**

- (A) The Alternative Odor BMP meets the same objective the Odor BMP that it is replacing, where the objective of the each Odor BMP specified in paragraphs (e)(1) through (e)(11), as defined in Table I of Appendix I;
 - (B) 60 days prior to requested start date to use the Alternative Odor BMP, the owner or operator of a rendering facility submits a written request to the Executive Officer stating how the Alternative Odor BMP meets the same objective as the Odor BMP it is replacing; and
 - (C) The Executive Officer approves the Alternative Odor BMP.
- (f) Permanent Total Enclosure and Odor Control Standards
 - (1) No later than 24 months after the date a Permit to Construct is issued pursuant to subparagraph (d)(1)(B), the owner or operator of a rendering facility shall not operate the following equipment and processes at a rendering facility unless such operations are conducted within a permanent total enclosure with ventilation pursuant to paragraph (f)(2) and an odor control system pursuant to paragraph (f)(4); or in a closed system pursuant to paragraph (f)(3):
 - (A) Conveyors associated with raw material transfer operations.
 - (B) Size reduction and conveying equipment, including but not limited to:
 - (i) Screw conveyors;
 - (ii) Breakers;
 - (iii) Crushers;
 - (iv) Hoppers;
 - (v) Grinders; and
 - (vi) Conveyors associated with raw rendering material sizing.
 - (C) Raw rendering material cookers.
 - (D) Process equipment for separating rendered fat from protein materials, including but not limited to:
 - (i) Centrifuges;
 - (ii) Presses;
 - (iii) Separators;
 - (iv) Pumps;
 - (v) Screens;
 - (vi) Tanks that are not completely enclosed;

- (vii) Bins and hoppers; and
- (viii) Conveyors used to transport materials between process equipment.

In addition to meeting the requirements of either a permanent total enclosure with ventilation and an odor control system pursuant to paragraph (f)(2) or a closed system pursuant to paragraph (f)(3), an owner or operator may elect to meet the alternative standards for a permanent total enclosure for the raw materials receiving area specified in paragraph (f)(5).

(2) Permanent Total Enclosure and Ventilation Standards

- (A) The combined area of all routine enclosure openings through which odors can escape from a permanent total enclosure shall not exceed 5% of the enclosure envelope.

- (B) Ventilation System Standard

A minimum inward face velocity of not less than 200 feet per minute shall be maintained at all times through each routine enclosure opening of a permanent total enclosure, except that a minimum inward face velocity of not less than 100 feet per minute shall be maintained when truck access doors are open. Truck access doors shall not be open except during ingress and egress of a truck.

- (C) Minimum inward face velocities for each permanent total enclosure shall be determined by placing an anemometer, or an equivalent device approved by the Executive Officer, at the center of the plane of any opening of the permanent total enclosure.

- (D) Exterior walls of a permanent total enclosure shall be constructed of solid material sufficient to withstand the pressure drop created by the inward face velocity of subparagraph (f)(2)(B). Construction shall be of material such as masonry, sheet metal, sheet plastic, wood, metal or aluminum siding, industrial overlapping plastic flap curtains, or other material as approved by the Executive Officer.

- (E) Alternative Ventilation System Standard

In lieu of meeting the minimum inward face velocity through each routine enclosure opening required under subparagraph (f)(2)(B), the ventilation system serving a permanent total enclosure shall be designed and operated such that a minimum of not less than 15 air changes per hour is maintained through the enclosure. The alternative standard shall be used subject to the following:

- (i) Not less than 60 days prior to the final enclosure compliance date required under clause (d)(1)(B)(iii) or (d)(1)(C)(iii), as appropriate, the owner or operator shall notify the Executive Officer of the intent to meet the alternative standard under this paragraph and shall submit engineering calculations to demonstrate that the ventilation system serving a permanent total enclosure is designed to meet the alternative ventilation system standard;
 - (ii) The Executive Officer will approve or disapprove the request within 60 days; and
 - (iii) If the Executive Officer disapproves the request to use the alternative standard, the owner or operator shall meet the ventilation system standard under subparagraph (f)(2)(B) upon startup of the enclosure.
- (3) Closed System Standards
 - (A) Each component of a closed system shall be maintained in a manner that minimizes leaks from occurring and prevents odors from escaping from the system, to the maximum extent possible.
 - (B) Material conveyors and troughs that are components of a closed system shall be completely enclosed on all sides, except for doors or panels for maintenance and personnel access.
 - (C) Bins and hoppers that are components of a closed system shall be completely enclosed on all sides, except for doors or panels, and maintenance and personnel access.
 - (D) Mating metal surfaces on doors or access panels under this paragraph shall be sealed with gasket material.
 - (E) Air gaps in components of a closed system shall be sealed with gasket material or with caulk or sealant.
 - (F) Each section of ductwork containing vapor within a closed system shall be sealed at every connection to mating components of the closed system using best industry practices and materials.
 - (G) Any alternative to a closed system, as defined under subparagraphs (f)(3)(A) through (f)(3)(F) that is proposed by the owner or operator of a facility subject to this rule must be approved by the Executive Officer.

- (H) A batch cooker shall not be considered a component of a closed system.
- (4) **Odor Control System Standards and Testing**

An odor control system, designed and operated to control fugitive odors from a permanent total enclosure subject to paragraph (f)(2) shall meet the following requirements:

 - (A) The control efficiency of an odor control device or system serving a permanent total enclosure shall not be less than:
 - (i) 70% for nitrogen compounds.
 - (ii) 70% for sulfur compounds.
 - (B) Nitrogen compounds shall be represented by the marker compound ammonia (NH_3), or other alternative marker compound proposed by the owner or operator and subsequently approved by the Executive Officer.
 - (C) Sulfur compounds shall be represented by the marker compound hydrogen sulfide (H_2S), or other alternative marker compound proposed by the owner or operator and subsequently approved by the Executive Officer.
 - (D) Within 180 days after the date a permanent total enclosure is required under subparagraph (d)(1)(B), an odor control device or system serving a permanent total enclosure shall be tested by an independent third-party to determine control efficiency. Testing and analytical methods shall be as follows:
 - (i) SCAQMD Method 207.1 for ammonia, and
 - (ii) SCAQMD Method 307 for hydrogen sulfide.
 - (E) The requirements of this paragraph shall not apply to operating standards or testing of odor control equipment designed and operated to control high intensity odors addressed under Rule 472.
- (5) **Alternative Standards for a Permanent Total Enclosure for Raw Material Receiving Area**

An owner or operator may elect to either install a permanent total enclosure with ventilation pursuant to paragraph (f)(2) or meet the following alternative permanent total enclosure requirements for any raw materials receiving area no later than 12 months after the date a Permit to Construct is issued pursuant to subparagraph (d)(1)(B):

- (A) Meet routine enclosure opening requirements specified in subparagraph (f)(2)(A) and exterior wall requirements specified in subparagraph (f)(2)(D).
 - (B) All access doors shall not be open except during ingress and egress of vehicles, equipment or people.
 - (C) Openings on opposite ends of a building where air movement can pass through both openings shall not be simultaneously open for more than 5 minutes.
 - (D) All routine enclosure openings for vehicles or equipment ingress and egress shall use one of the following:
 - (i) Automatic doors with an air curtain mounted on the interior of the opening with a design velocity of 3,000 feet per minute, that is operated continuously when the door is open,
 - (ii) Vestibule;
 - (iii) Air lock system; or
 - (iv) An alternative method to minimize release of odors from each enclosure opening of the building enclosure may be used if the owner or operator can demonstrate to the Executive Officer (an) equivalent or more effective method(s) to those specified in this subparagraph.
 - (F) If a building enclosure meeting the requirements of this paragraph is ventilated, the ventilation system shall meet the requirements of paragraph (f)(2) and shall be ventilated to an odor control system that meets the requirements of paragraph (f)(4).
- (g) Wastewater Treatment
- After the date a permanent total enclosure is required under subparagraph (d)(1)(C), the owner or operator of a rendering facility shall not operate the following wastewater treatment equipment and processes handling wastewater at a rendering facility, including water used in rendering operations, equipment and area washdown water related to rendering, and water from control equipment related to rendering except in a closed system or located within a permanent total enclosure subject to paragraph (f)(2):
- (1) Screens;
 - (2) Skimmers;
 - (3) Clarifiers, including dissolved air flotation;

- (4) Settling tanks;
 - (5) Sludge dewatering equipment;
 - (6) Sludge drying equipment; and
 - (7) The rendering facility treated wastewater outlet to city sewer.
- (h) Odor Mitigation Plan (OMP)
- (1) An OMP submitted prior to the date a permanent total enclosure is required under subparagraph (d)(1)(B) shall address the following:
 - (A) All facility-specific information below:
 - (i) Facility name;
 - (ii) Location address;
 - (iii) Days and hours of operation;
 - (iv) Facility ID number;
 - (v) Mailing address; and
 - (vi) Title and phone number of person responsible for addressing community complaints received by the facility.
 - (B) Description of rendering-related odor-emitting areas within the facility;
 - (C) Configuration of all odor control equipment that exists at the time of OMP submittal, and the equipment, processes and buildings or rooms it serves;
 - (D) Description of work practices that exist at the time of OMP submittal designed to minimize odors from migrating off the facility property;
 - (E) Prioritization of rendering-related odor-emitting areas within the facility, in order of highest-to-lowest odor intensity;
 - (F) For each rendering-related odor-emitting area designated in subparagraph (h)(1)(B):
 - (i) Description of odor mitigation activities proposed to address odor within the odor-emitting area;
 - (ii) Intent to either enclose an odor-emitting area within a permanent total enclosure or operate processes located within the odor-emitting area in one or more closed systems, for all equipment and processes subject to paragraph (f)(1) or subdivision (g) that are not located within a permanent total enclosure or operated in a closed system; and

- (iii) A detailed construction schedule for each proposed permanent total enclosure.
 - (G) Explanation of why construction and commissioning of proposed permanent total enclosures cannot be expedited prior to the date a permanent total enclosure is required under subparagraph (d)(1)(B).
- (2) An OMP submitted after the date a permanent total enclosure is required under subdivision (d) shall address all information required under subparagraphs (h)(1)(A) through (h)(1)(E) and clause (h)(1)(F)(i).
- (3) Approval and Disapproval of an OMP
 - (A) Within 90 days after submittal of an OMP to the District, the Executive Officer will approve or disapprove the OMP.
 - (B) The Executive Officer will notify the owner or operator in writing if an OMP is disapproved. If an OMP is disapproved, the owner or operator shall resubmit the OMP to the Executive Officer within 90 days after notification of disapproval. The resubmitted OMP shall include any information necessary to address deficiencies identified.
 - (C) The Executive Officer will approve the OMP if it is complete and the Executive Officer concurs that all odor mitigation activities proposed to address odors within the odor-emitting areas at the facility are sufficient to resolve the odor problem that triggered submittal of the OMP.
 - (D) Failure to submit an OMP within 90 days after notification by the Executive Officer, or failure to have an approved OMP by the date allowed under subparagraph (h)(3)(B) for an OMP that was denied by the Executive Officer and subsequently resubmitted is a violation of this rule.
- (4) OMP Plan Fees

An OMP submitted or resubmitted under this subdivision shall constitute a plan for the purpose of fees assessed under Rule 306 – Plan Fees.
- (i) Signage and Tracking of Odor Complaints at Rendering Facilities
 - (1) Upon startup for a new facility, or within 6 months after (*date of adoption*) for an existing facility, an owner or operator of a rendering facility shall post a sign that specifies 1-800-CUT-SMOG as the SCAQMD contact number for odor complaints. The sign shall include the name of the rendering facility. The sign may also include the name of a contact person

at the rendering facility to call for questions or to whom odor complaints may be reported. The sign shall meet all of the following requirements, unless otherwise approved by the Executive Officer:

- (A) The sign shall be installed within 50 feet of the main entrance to the facility;
 - (B) The dimensions of the sign shall be at least 48 inches wide by 48 inches tall;
 - (C) Lettering on the sign shall be at least 4 inches tall;
 - (D) Lettering color shall contrast with the sign background;
 - (E) The lower edge of the sign shall be located between 6 and 8 feet above grade; and
 - (F) The sign shall be unobstructed and clearly visible to a person outside the facility property.
- (2) Notify the SCAQMD by telephone at 1-800-CUT-SMOG no more than three hours after receiving an odor complaint, after facility personnel became aware of the complaint, or after facility personnel should reasonably have become aware of the complaint.
- (3) Upon startup for a new facility, or within 6 months after (*date of adoption*) for an existing facility, a sign shall be posted at each truck entrance at a facility subject to this rule requiring all incoming trucks to be enclosed or fully covered. The sign shall meet all of the requirements of subparagraphs (i)(1)(A) through (i)(1)(F), unless otherwise approved by the Executive Officer.

(j) Recordkeeping Requirements

Upon startup for a new facility, or within 30 days for an existing facility, the owner or operator of a rendering facility shall collect and maintain the following records:

- (1) Records of all readings taken by anemometer to demonstrate compliance with the inward face velocity requirement of subparagraph (f)(2)(b);
- (2) A legible written or electronic log of all odor complaints received by the rendering facility contact person pursuant to paragraph (i)(1). The odor complaint log shall contain, at a minimum, the following information:
 - (A) Date and time complaint was received;
 - (B) Date and time of alleged odors;
 - (C) Outdoor ambient temperature at time of complaint;
 - (D) Odor description and intensity (i.e., weak, moderate, strong);

- (E) Weather conditions;
 - (F) Wind speed and direction;
 - (G) Name and contact phone number of complainant, if provided; and
 - (H) Determination of cause for odor emissions that generated the complaint, if found.
- (3) Weekly records of the weight of inedible raw rendering materials, for rendering operations located at integrated rendering facilities, to demonstrate compliance with the exemption for batch cookers under paragraph (l)(3).
 - (4) Records of each day of operation shall be kept for low-use rendering facilities exempt under subparagraph (l)(4) shall be kept and made available to SCAQMD personnel upon request.
 - (5) The owner or operator of a rendering facility shall maintain records required under this subdivision on the premises of the rendering facility for at least three years and make records available upon request by the Executive Officer.
- (k) Equipment Breakdowns and Emergency Rendering Services
- On and after (*date of adoption*) an owner or operator of a rendering facility shall be allowed additional time to move raw rendering materials into a permanent total enclosure, provided the additional time is necessary due to the inability of another rendering facility to conduct rendering operations, and the owner or operator complies with the following requirements:
- (1) Within 24 hours after the facility operator becomes aware that additional raw rendering materials will be received and processed, the owner or operator of said facility shall provide evidence to the Executive Officer via written communication from the rendering facility from which additional raw rendering materials will be sent that:
 - (A) The facility sending raw rendering materials cannot conduct rendering operations; and
 - (B) The reason(s) for the inability to process raw rendering materials.
 - (2) The length of time in which additional raw rendering materials will be received and processed does not exceed 7 days.
 - (3) The owner or operator of the facility receiving and processing additional raw rendering materials notifies the Executive Officer within 24 hours after the facility operator becomes aware that additional raw rendering materials

will be received by calling 1-800-CUT-SMOG, where such notification shall include:

- (A) The name of the facility, address, and a contact for the rendering facility that cannot conduct rendering operations;
 - (B) The length of time, not to exceed 7 days, that additional rendering materials will be received and processed, and;
 - (C) An estimate of the amount of materials that will be processed.
- (4) The owner or operator of the rendering facility that will be receiving and processing additional raw rendering materials has not received a Notice of Violation relating to odors or implementation of provisions of this rule within the past 12 months;
- (5) The owner or operator of the rendering facility that will be receiving and processing additional raw rendering materials complies with all the provisions of this rule with the following allowances:
- (A) If a permanent total enclosure is constructed pursuant to subdivision (f), incoming raw rendering materials shall be transferred into the permanent total enclosure or into covered containers within 4 hours after the end of material delivery;
 - (B) If the permanent total enclosure is not constructed pursuant to subdivision (f), incoming raw rendering materials shall be stored in a covered container within 6 hours after delivery of material delivered at ambient temperature, or within 8 hours after delivery for materials delivered below ambient temperature.

(l) Exemptions

- (1) The following facilities are not subject to Rule 415:
- (A) Facilities conducting only edible rendering operations that do not conduct inedible rendering or handle or process trap grease;
 - (B) Collection centers that do not conduct inedible rendering or handle or process trap grease; and
 - (C) Facilities that process trap grease but do not conduct inedible animal rendering operations.
- (2) Wastewater treatment operations at a rendering facility shall not be subject to the enclosure requirement of subdivision (g), provided that:
- (A) Each volume of rendering wastewater at a rendering facility integrated with a slaughterhouse or meat packing plant is diluted

- with more than 30 volumes of wastewater from other sources within the facility, based on a ratio of the most recent three-year average of rendering wastewater to non-rendering wastewater processed in the wastewater treatment plant; or,
- (B) Each volume of rendering wastewater at a rendering facility not integrated with a slaughterhouse or meat packing plant is diluted with wastewater from other sources within the facility, provided that:
- (i) The owner or operator demonstrates to the Executive Officer that an appropriate dilution volume of non-rendering wastewater to rendering wastewater is processed in the wastewater treatment plant;
 - (ii) The ratio of non-rendering wastewater to rendering wastewater is not less than 30:1; and
 - (iii) Process water and not clean water is used for dilution; or
- (C) After mixing of rendering wastewater with non-rendering wastewater, any wastewater exposed to the atmosphere has an average chemical oxygen demand (COD) lower than 3000 mg/L, based on the most recent three year average sampling data, which shall be made available to the Executive Officer upon request.
- (3) Batch cookers at integrated rendering facilities that process less than 130,000 pounds of inedible raw rendering materials per week shall not be subject to the enclosure requirements of subparagraph (d)(1)(B), provided the cargo area of the vehicle that is used to store and haul materials after rendering is completely covered or fully tarped in accordance with the requirements of paragraph (e)(1).
- (4) Rendering operations that are conducted not more than 25 days in any calendar year shall not be subject to the enclosure requirements of subparagraph (d)(1)(B).
- (5) Blood meal processing operations at a facility integrated with a slaughterhouse or meat-packing plant shall not be subject to this rule, provided the operation is conducted in a closed system as defined in paragraph (c)(2) and is vented to an odor control system meeting the control efficiency requirements under subparagraph (f)(4)(A).

- (6) Meat and bone meal operations after completion of the press fat processing operation, after oil and fat have been removed from the meat and bone meal. This exemption does not apply to press fat processing.
- (7) Transport vehicles, as used in paragraphs (e)(1) and (e)(3) shall not include forklifts.
- (8) Trap grease unloading operations shall not be subject to the requirement for permanent total enclosure under subdivision (f) provided the trap grease is unloaded only through a hose into a wastewater tank or separator with an access or viewing hatch that is not open except during unloading operations or for maintenance.

Appendix A

Table 1		
	Odor BMP	Odor Reduction Objective
(e)(1)	Cover Incoming Trucks	To reduce odors from incoming raw materials during transport on freeways and streets
(e)(2)	Delivery of Raw Rendering Materials	Limit the amount of time raw materials sitting in the sun (after enclosure standard is effective)
(e)(3)	Washing of Outgoing Transport Vehicles	Prevent raw materials remaining on exiting trucks
(e)(4)	Washing of Drums and Containers	Prevent raw materials remaining in drums and containers exiting the facility
(e)(5)	Holding Time of Incoming Raw Rendering Materials	Limit the amount of time raw materials sitting in the sun (before enclosure standard is effective)
(e)(6)	Repair of Raw Material Receiving Area	Remove accumulation to prevent bacteria growth from standing water resulting in odors
(e)(7)	Holding Time of Raw Materials after Size-reduction	Prevent raw materials sitting in totes at batch cooking facilities for an extended period of time
(e)(8)	Holding Time of Cooked Materials	Prevent cooked materials sitting in totes or trailers at batch cooking facilities for a extended period of time
(e)(9)	Transfer of Raw or Cooked Rendering Materials between Enclosures	Ensure materials being transferred between operations are covered
(e)(10)	Washdown of Receiving Area	Remove accumulation of animal parts in and around receiving pit and floor where incoming raw material is deposited
(e)(11)	Cleaning Floor Drains	Remove accumulation of animal matter in drains